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## **Subjective wellbeing and the MENA region**

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## **Subjective Well-being and the MENA Region**

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### ***Abstract***

*An area of considerable debate amongst social scientists and the wider public is the nature of the relationship between an individual's level of material wealth and that person's perceived "happiness" or well being. In discussion and research on this topic, the term subjective well-being (SWB) has become widely used and encompasses a number of measures or meanings. This paper provides a comprehensive review of the theoretical and empirical literature in this area. Several key drivers of SWB are identified and discussed in the context of the Middle East and North African (MENA) region using data from survey data collected by the World Values Survey (WVS) from 1981–2007. A comparison is made of approaches to measuring "development" or "human progress" employing aggregate objective measures as opposed to individual survey responses.*

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## ***Introduction***

An area of considerable debate amongst social scientists and the wider public is the nature of the relationship between an individual's level of material wealth and that person's perceived "happiness" or well being. In discussion and research on this topic, the term subjective well-being (SWB) has become widely used and encompasses a number of measures or meanings. Two specific measures of SWB used in the literature are happiness and overall life satisfaction (Inglehart et al, 2008).<sup>1</sup> The acceptance of such meaningful measures has led to a growing body of research which is looking to evaluate the application of SWB in shaping and appraising government policy. On the one hand SWB may be viewed as a policy objective while on the other it may serve as a tool with which to assess the relative merits of policy alternatives.

Economists and policy makers have generally tended to analyze policies through consideration of their impact on income related measures or on behavioral effects (such as consumption levels). These results then tend to be related to welfare through some theoretical model based around certain assumptions regarding individual utility responses. Following on from this approach, growth in per capita gross domestic product (GDP) or per capita national income levels have become widely accepted as meaningful measures of improved welfare and desirable policy objectives for governments at a national level. More recently research which employs "happiness surveys" has begun to be more widely used in helping to evaluate public policy prescriptions.

In a seminal paper Easterlin (1974) reported that over time, despite increases in personal income, people were not reporting an increase level of happiness. This pattern has also been consistently observed across a number of European countries and also Japan (Di Tella and MacCulloch, 2006). This is despite the fact that at a point in time within a country, individuals on higher income are generally observed to exhibit greater SWB than those on lower incomes. Moreover, in cross country studies, richer countries are reported to be happier than poorer ones. This suggests that the revealed SWB of individuals is based around their relative income rather than absolute income and that people may also redefine their assessment of wellbeing over time in line with other factors (Luttner, 2005; Clark, 2003; Caporale et al, 2009). These influences include a number of socio-economic and demographic variables as well as institutional factors. Examples include: leisure, health, personal relationships, unemployment, inflation and the environment. The extent to which people live in a tolerant society has been found to have significant positive impact in some studies, as has the degree of gender equality, personal security and perceived individual freedom (Veenhoven, 2007a; Mabe, 2007; Inglehart et al, 2008). Over

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<sup>1</sup> In this paper, the terms social welfare and SWB are used interchangeably with both happiness and (overall) life satisfaction unless a distinction is clearly made.

times as situations changes these factors could be exerting either positive influences or negative influences on a person's perceived happiness. Job quality and the distribution of income within a society have also been seen as impacting on self-reported happiness, while a person's age, gender and ethnic group can also shape their relative happiness (Stevenson and Wolfers, 2008; Dockery, 2005).

This paper provides a comprehensive review of the theoretical and empirical literature in the area of SWB. Several hypotheses regarding key drivers of SWB are identified and discussed with reference to data gleaned from longitudinal survey data collected by the World Values Survey (WVS) from 1981–2007 (<http://www.worldvaluessurvey.org/>).

## ***Review of Literature***

The study of happiness and public policy is a very old topic, discussed at length in the 18th century by philosophers such as Smith, Bentham and Mill (Layard, 2005; Martin, 2005). Bentham (1776), for example, argued that the purpose of public policy should reflect the utilitarian doctrine: 'the greatest happiness for the greatest number'. With the evolution of the economics discipline over the last two centuries, however, the focus of governments and policy makers became centred on more materialistic outcomes as a measuring rod for improvements in social welfare and notions of social and economic progress generally.

Kahneman et al (1997) have raised doubts about the methodological approach in economics which has focused on rational agents maximizing utility. From a theoretical perspective they argue that it is meaningful to extend the notion of utility beyond one of revealed choices to include Bentham's concept of experience utility. Traditionally, economists have tended to focus their attention on studying peoples' revealed preferences that is their actual choices and decisions, rather than their stated intentions or subjective reports of likes and dislikes. Work in the area of psychology and behavioural economics; however, highlights how individuals depart from this model of rational economic decision making in a variety of ways. Moreover this turns the notion of utility maximization into an empirical proposition.

Consequently GDP and related measure are increasingly being seen by researchers to be inadequate in fully capturing the notion of improved welfare or SBW within a country (Diener, 1984, Farid & Lazarus, 2008). This view is reflected in the (increasing) use of a variety of indices in policy discussion such as the UNDP's Human Development Index (HDI), the misery index, so-called by economists as it relate inflation and unemployment,

the Happy Planet Index and Gross National Happiness (GNH) (Ura and Galay, 2004; Veenhoven, 2007; Diener, 1984; Inglehart, 199; [www.neweconomics.org](http://www.neweconomics.org)). A great deal of work is underway to evaluate the contribution of SWB analysis in shaping and appraising policy (Frey and Stutzer, 2002; Di Tella and MacCulloch, 2006). This approach, for example, can help in evaluating the effects of government expenditure programs as well as in framing welfare policies and tax policies. It can also be used to supplement traditional cost-benefit analyses and hedonic regression methodology traditionally used in dealing with pricing of externalities.

Layard (2005) has suggested that the challenge to public economics is to incorporate the findings of modern psychology while retaining the cost benefit rigor of economics in order to identify what helps and hinders happiness.

The importance of developing an operational measure of SWB that is robust and valid and which allows for meaningful policy application, is evidenced by the extent of applied research being undertaken by institutions and agencies and the related large scale data collection. This work includes the General Social Survey undertaken in the United States the German Socio-Economic Panel, the Eurobarometer Surveys which have been conducted in the European Union since 1976 and the more recent (and more sophisticated) European Social Survey (Di Tella and MacCulloch, 2006; Davis, Smith and Marsden, 2001). The Global Project on Measuring the Progress of Societies is an OECD initiative with the objective of studying how the wellbeing of society is evolving and to better inform decision making in both the private and public sectors ([www.oecd.org](http://www.oecd.org)). As an example of this application, the Australian government employs a wellbeing framework to underpin its official economic and financial policy advice. While analysis is based on economic principles, it incorporates input from other disciplines and encourages a broad assessment of social and environmental costs and benefits as well as economic outcomes.

Since the 1950s psychologists have become increasingly interested in the notion of personal wellbeing, moving beyond a previous pre-occupation with studying negative emotional states such as depression and anxiety (van Hoorn, 2007). Consensus has emerged that self-reporting can indeed convey important information on underlying emotional states and considerable developments have been made in attempting to measure what can be thought of as subjective notions of well being.

Over the past decades the SWB literature has progressed rapidly, reflecting work not only by psychologists but social scientists across an array of disciplines. As empirical work has been

extended, this area of research has increasingly attracted the attention of politicians and policy makers. Teams of interdisciplinary researchers have challenged the suitability of traditional economic measures of success as useful indicators of sustained welfare enhancement (Praag and Ferrer i Carbonell, 2008; Frey and Stutzer, 2001; Diener and Suh, 1997; Diener, 1984). To date, no clear results have been established regarding the role that income levels and also economic growth over time play in actually influencing recorded SBW (Layard, 2005; Di Tella and MacCulloch, 2006). At the individual or household level, there is strong support for a significant and positive relationship between income and happiness, while within country evidence also suggests that richer people tend to be happier than poorer people on average (Caporale et al, 2009; Di Tella, MacCulloch and Oswald, 2001). Cross-sectional comparisons across countries, however, do not clearly establish a relation between income levels and SWB (Frey and Stutzer, 2002; Inglehart et al, 2008). Moreover, a number of studies have found that although real income has risen significantly in several countries over past decades, self-reported SWB has remained flat or even fallen (Frey and Stutzer, 2002; Stevenson and Wolfers, 2008). There is evidence from cross-country studies which suggests a positive relationship exists between the level of GDP per capita and wellbeing up to a level of around USD 20,000 per capita, but that the relationship does not hold for relatively wealthier nations (Helliwell, 2003). Results from the New Economic Foundation's Happy Planet Index (HPI) study in 2005 suggest that reported life satisfaction indicates that above certain levels of income, relative income becomes a more important determinant of well being for individuals ([www.neweconomics.org](http://www.neweconomics.org)).

In some cases the inequality of SWB within countries has been observed to increase despite rising incomes. The question of the effect of the distribution of income in a society has been addressed in a study by Alesina, Di Tella and MacCulloch (2001) which suggests that a significant and negative inverse relationship between inequality and happiness exists in Europe, but not in the United States. This is, *inter alia*, seen as a reflection of cultural differences. Caporale et al (2009) have suggested that reference income, or a person's relative position, is an important determinant of wellbeing.

Most public policy analysis is based around performance measures that relate to income levels, either at an individual or some aggregate level, or measures of consumption of a good or service. This ignores the broader question of how and to what extent this approach relates to the impact of

policy on individuals' perceived SWB (Diener, 1984; Dipietro and Anuoruo, 2006; Praag and Carbonell, 2008). Evidence suggests that as countries get richer, in fact, no discernible increases in happiness are observed (Kenny, 2004; Inglehart et al, 2008).

Martin (2005) argues that people are not always motivated by financial incentives, and in some cases, they may actually reduce motivation instead of increasing it. From an economic perspective, it is considered that progress or development should be about improving individual wellbeing.

There is now a significant body of research which reports that SBW, as determined by a range of quantifiable measures, is influenced by a raft of socio-economic and demographic factors related to individuals (Ross and Van Willigen, 1997; Frey and Stutzer, 2001; Clark and Oswald, 2002; Frey and Stutzer 2002; Caporale et al, 2009; Di Tella and MacCulloch, 2006). These include such things as relationship status, leisure, health and educational level, the state of the environment, inflation and unemployment. Job quality as well as the distribution of income within a society has also been seen to be important influences on self-reported happiness (Dockery, 2005). Age and gender can also be influential in determining a person's SBW at a particular point in time as can the membership of a particular ethnic group within a country. (Stevenson and Wolfers, 2008;). Many of these factors may be also be correlated or have interactive effects in their influence on happiness.

Institutional factors within a society have also been shown to impact happiness levels. The extent to which people live in a tolerant society, for example, is found to be significant in some studies, as has gender equality, personal security, individual freedom and justice (Veerhoven, 2007a; Mabe, 2007; Inglehart et al, 2008). A study by Ross and Van Willigen (1997) has indicated that education is an important element in influencing a person's wellbeing, while it has also been reported that an individual's family situation and marital status can be important factors (Dockery, 2005; Clark and Oswald, 2002). A study in the US, meanwhile, identified a closing of the 'happiness gap' between genders over the period 1972-2006 (Ross and Van Winkleman, 2004). Frey et al (2007) in a study of the Republic of Ireland covering the period 1970-1990 looks at the impact of terrorism in that country on life satisfaction, showing to that people would on average be prepared to give up around 40 per cent of their income to achieve a more peaceful society.

In the field of economics application of the SWB concept has been used in addressing a range of micro and macroeconomic issues (Alesina, Glaeser and Sacerdote, 2005). Some of the macroeconomic areas that have been investigated include the links between SWB and gross domestic product (GDP), economic growth, unemployment and inflation. A number of studies

have also looked at how labour market regulation impacts the wellbeing of individuals (Clark and Oswald, 1994). Unemployment affects are clearly seen to impact SWB through two channels. One is on the individual who loses a job, the other is on the community at large as result of the fear of becoming unemployed (Becchetti et al, 2006). In a study of the youth labour market in Australia, Dockery (2005) provides evidence that job quality is an important determinant of happiness, suggesting that in this case some unemployment may not necessarily be involuntary. Approaches using SWB can also be used to supplement traditional cost-benefit analyses and hedonic regression methodology traditionally used in dealing with pricing of externalities, as for example in issues related to environmental externalities. Van Praag and Baarsma (2005) use SWB data in analysis of measuring the impact of noise pollution from an airport. A study by Welsch (2006) uses a similar methodology in assessing the effect of air pollution in a study encompassing 10 European countries.

A recent global happiness survey by The Nielsen Company (2008) found that the happiness of males worldwide tends to be more connected to monetary rewards, while for women, friendships and relationships are more influential. Happiness was found to be a local and personal matter and identified a number of factors including mental health, career satisfaction and relationships which were important determinants. While this commercial survey contributes to the happiness debate, it is specific to consumers and is based on polling. It reflects, however, the extent to which this area of study is permeating the market-place and being taken seriously by the private business sector.

## ***Socio-economic Research Issues***

An issue of interest to researchers and policy makers is the role that income disparity within a country might play in influencing perceived happiness levels. Is it a person's relative income position that is important? In a country with a relatively affluent "lifestyle" (at least for certain strata within the society) where there is a relative focus on high-end consumption along with emphasis on social interaction, this might well be the case. This is likely to be particularly problematic in a region like the Middle East and North Africa (MENA) where there exists considerable disparity in terms of income levels as well as many other socio-economic measures such as education and health standards (Noland and Pack, 2007).<sup>2</sup> Moreover, some MENA

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<sup>2</sup> The MENA region encompasses the Gulf countries of the United Arab Emirates, Saudi Arabia, Bahrain, Kuwait, Qatar, Oman (being the six members of the Gulf Cooperation Council), Yemen, Iraq and Iran along with Algeria, Morocco, Libya, Egypt and Tunisia in North Africa.



countries tend to be characterized by the concentration of relatively wealthy urban centres of population and industry existing alongside underdeveloped rural regions.

Socio-demographic factors are also important considerations with many of the countries, for example, having fast growing and relatively young populations. The fact that the labour forces of many of these countries comprise a disproportionately high percentage of expatriates, both professional and un-skilled is also a compounding issue.

A number of research questions that look at the relationship of the revealed individual SWB measures with income levels can be identified from the literature. These include the following:

- Are persons with higher incomes at a point in time happier than those with lower incomes?
- How important is relative (to other people) income in determining an individual's happiness at a point in time?
- How does rising income over time impact happiness?
- What role do non-economic factors play in the determination of SWB?

The following section provides some comparison of different methodological approaches that have captured aspects of development and wellbeing in the MENA region. The discussion is linked to various socio-demographic features of economies in the context of the questions raised above.

## Discussion

The MENA countries chosen for consideration in this paper are those that have been included in the most recent wave of the WVS (during 2005-2008) and/or an earlier wave (2000-2002). The standard methodological approach of the WVS allows for meaningful cross-country and time-series comparisons. Of the eight countries considered, only two, Algeria and Saudi Arabia, were surveyed in the earlier wave (Appendix 1).

Table 1 provides data related to three different measures commonly employed in discussions relating to “economic development”. As can be seen, there exists wide variation in average income or gross national income (GNI) per capita across the economies. Other measures do not seem to be closely correlated to this factor, notwithstanding increases over time in literacy and average income.

**Table 1 – Socio-Economic Measures**

	<b>GNI per capita (USD)</b>		<b>Life Expectancy (yrs)</b>		<b>Adult Literacy (%; ages &gt;15)</b>	
	<b>2000- 2001</b>	<b>2008</b>	<b>2000</b>	<b>2008 (Male)</b>	<b>2000</b>	<b>2008</b>
<b>Algeria</b>	1630	4260 (3)	71	71	33	75
<b>Egypt</b>	1530	1800	67	68	45	66
<b>Iran</b>	1750 (3)	3540	69	69	24	82
<b>Iraq*</b>	-	-				
<b>Jordan</b>	1750 (3)	3310	72	71	10	91
<b>Morocco</b>	1180	2580	67	69	51	56
<b>Saudi Arabia</b>	7230 (1)	15500 (1)	73	71	24	85
<b>Turkey</b>	2540 (2)	9340 (2)	70	69	15	89

\*Data not available

Numbers in parentheses indicate rankings of countries presented in each survey.

**Source:** World Bank, World Development Report (2003; 2010)

The 2009 Human Development Report, prepared by UNDP, provides a ranking of countries based on the HDI. This index incorporates elements of national income, life expectancy and education; these are viewed as useful proxies to capture development in a broad sense. The HDI ranks 182 countries in its listing. The HPI approach draws on the Gallup World Poll and has three components: life expectancy, life satisfaction and ecological footprint ([www.neweconomics.org](http://www.neweconomics.org)). HPI scores have been calculated for 143 countries based on 2005 data. Results for both the HDI and HPI relevant to this study are presented below (Table 2).

**Table 2 – Country Rankings**

	<b>2007</b>	<b>2005</b>
	<b>HDI</b>	<b>HPI</b>
	<b>Rank</b>	<b>Rank</b>
<b>Algeria</b>	104	40
<b>Egypt</b>	123	12 (1)
<b>Iran</b>	88 (3)	81
<b>Iraq</b>	-	79
<b>Jordan</b>	96	26
<b>Morocco</b>	130	21 (3)
<b>Saudi Arabia</b>	59 (1)	13 (2)
<b>Turkey</b>	79 (2)	83

Figures in parentheses indicate relative rankings within the study.

**Source:** UNDP, HDR (2009); HPI

Certainly the rankings provided in these approaches do differ, not unexpected given the method of compilation of each. The HDI does seem to rank countries more in line with the per capita income levels as reflected in Table 1 although the influence of other objective factors is apparent to varying degree. The HPI ranking is at odds with that of HDI, both in terms of the relative rankings of the MENA countries looked at and in their global rankings. While the HDI employs objective, aggregate level variables in its calculus, the HPI incorporates direct surveying of individuals within each country in

deriving their index. How and to what extent to which such aggregate measures may be useful for policy input is an open question.

An alternative attempt to look at some meaningful way of capturing the results of “human development” within a country, including shifts over time, is to directly survey individuals to determine some revealed level of satisfaction or well being and to focus on exploring what underlying influences might be at work.

Table 3 provides a comparison of self-reported “life satisfaction” from the HPI (for 2005) and the WVS for two periods (for country surveys in 2000-2002 and in 2005-2007). While the scales used in sampling the populations are similar in that responses are recorded on a scale from 0 to 10, with 10 seen as the highest level of satisfaction, the studies can only be cautiously compared. Mean values for each country are shown in the table. When compared with the WVS, HPI results have shown higher satisfaction levels for wealthier countries and lower values for poorer countries (NEF, [www.happyplanetindex.org](http://www.happyplanetindex.org)). Sampling methodologies also differ.

**Table 3 – Satisfaction Comparisons**

	<b>WVS 2000-2002</b>	<b>WVS 2005-2008</b>	<b>HPI Study 2005</b>
	<b>Satisfaction with Life</b>	<b>Satisfaction with Life</b>	<b>Life Satisfaction*</b>
<b>Algeria</b>	5.7	n.a.	5.6
<b>Egypt</b>	5.4	5.7	6.7 (2)...{1}
<b>Iran</b>	6.4 (2) {1}	6.4 (3)	5.6
<b>Iraq</b>	5.2	4.5	5.4
<b>Jordan</b>	5.6	7.1 (2)	6.0 (3)... {2}
<b>Morocco</b>	6.0 (3) {2}	5.3	5.6
<b>Saudi Arabia</b>	7.3 (1)	n.a.	7.7 (1)
<b>Turkey</b>	5.6 {3}	7.5 (1)	5.5

\* One element in the overall HPI Index

Numbers in parentheses indicate rankings of countries presented in each survey. Numbers in { } allow comparison of the six countries common to each survey over time.

**Source:** WVS; NEF

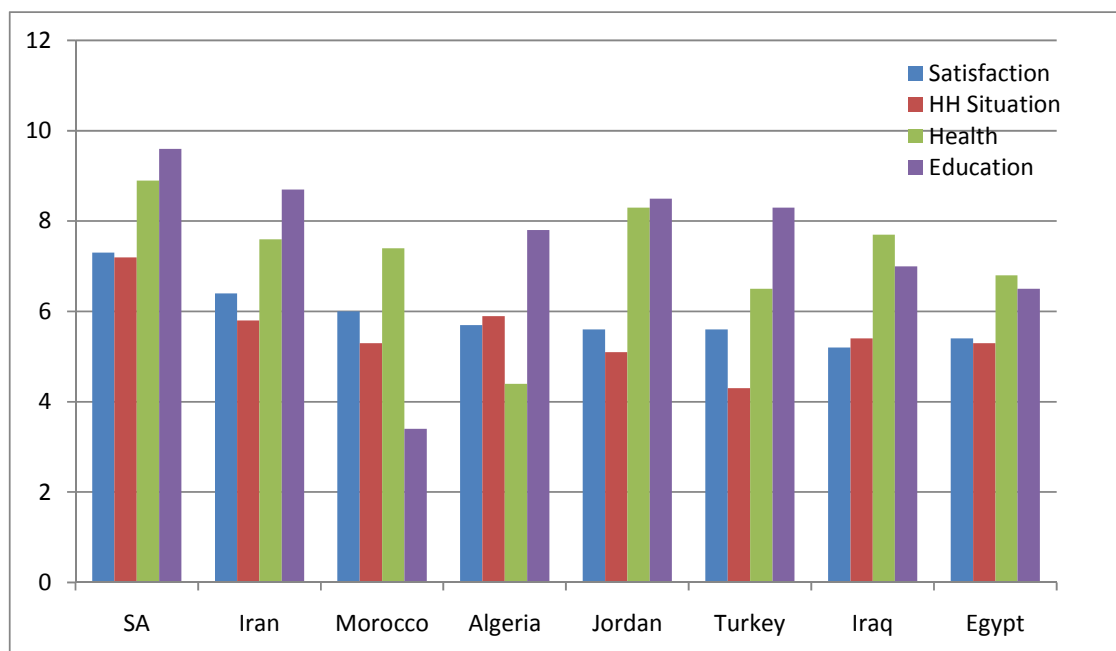
Results based on the WVS suggest that it is not apparent that life satisfaction has improved for all countries over time (Table 3). This is despite the fact that some likely drivers measured at an aggregate level for each country such as per capita income and education levels have increased and life expectancy has remained somewhat unchanged (Table 1). The relative rankings have also changed when looking at the six countries common to both waves. Morocco and Iraq, for example, have fallen relatively as well as absolutely in their measure of satisfaction. In contrast, Turkey and Jordan have improved significantly, both relatively and absolutely. The HPI study, for 2005, presents some different relative rankings. Egypt, in particular, comes out better in this survey. The following charts provide further evidence for MENA countries from the two most recent waves of the WVS. They provide a direct comparison of respondents' reported life satisfaction with their perceived household financial and health situations as well as a measure of level of education.

The data used in the charts can be interpreted as follows. As noted above, satisfaction is measured on a scale of 0 to 10, with 10 being very satisfied. Mean values are reported here for each country. The household financial situation of respondents was also measured on a scale from 0 to 10, with 10 representing the highest level of satisfaction. Mean values are presented here as well. The health figures are based on the percentage of respondents who reported their health as either very good or good. This percentage was then scaled out of 10; hence the figures here suggest that the closer the value to 10, the higher the proportion of respondents with perceived good health. The WVS survey instrument records the percentage of respondents with various levels of education. The figures here reflect the proportion of respondents who had completed elementary education or above, scaled out of 10.

The countries in both charts are presented in descending order of life satisfaction. The results for the two waves, 2000-2002 and 2005-2008, are presented separately for the two waves. The earlier survey, reported in Chart 1, suggests that lower life satisfaction across countries is positively correlated with the perceived financial position of households. Health and education do not exhibit any clear relationship with the level of satisfaction. In looking at the five countries in the most recent survey, there does appear to be some direct correlation between reported life satisfaction and both the household financial situation and education level. Again, the health level does not tend to relate to satisfaction.

**Chart 1**

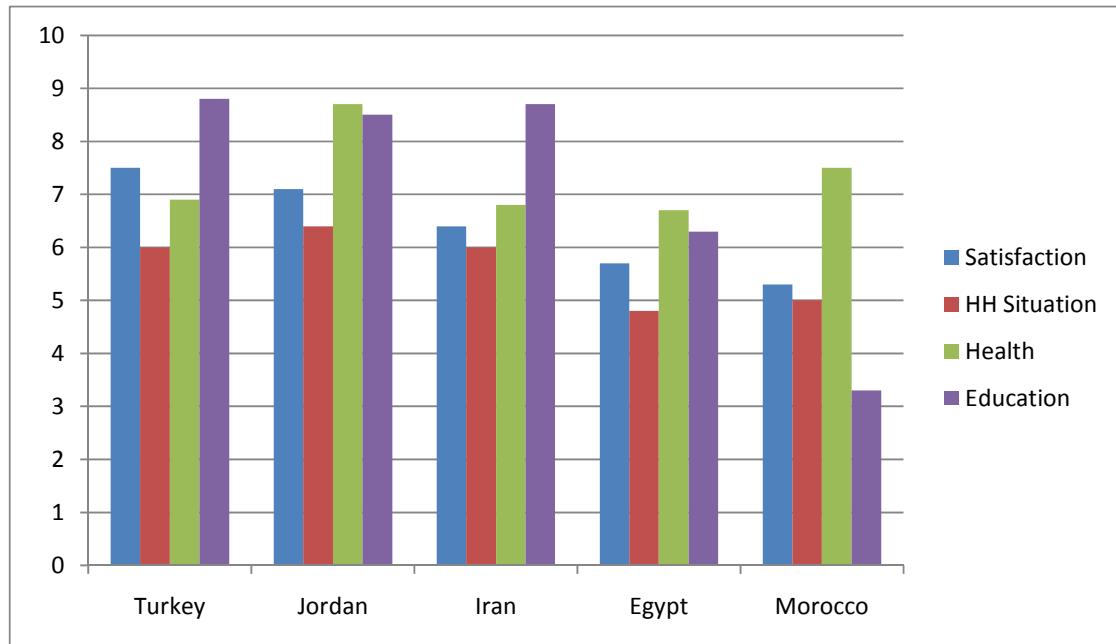
**WVS Survey Results 2000-2002**



**Source: WVS**

**Chart 2**

**WVS Survey Results 2005-2008**



**Source: WVS**

These results provide only a cursory first glance at some possible socio-economic factors that might be expected to be linked to reported life satisfaction in the MENA countries. The available data allows for more sophisticated analysis of each individual country to obtain a clearer indication of the possible determinant of satisfaction. Comparison across countries could better be made based on these outcomes.

## ***Conclusion***

The study of individual subjective wellbeing (SWB) is becoming an increasingly important focus for both academic researchers and policy makers in recent times. This study provides a review of recent literature in the area. Theoretical viewpoints are introduced along with empirical studies which attempt to measure SWB and identify and analyze its determinants. Some research questions are outlined related to SWB and the expected influence of a number of socio-economic factors.

The descriptive analysis in the paper looks at eight countries from the MENA region. A number of objective socio-economic measures are presented for each country, including per capita

income, life expectancy and literacy levels. Two broad country level index measures of “progress” or “life improvement”, the HDI and the HPI are compared and contrasted.

The results from the WVS survey of selected MENA countries over two waves, 2000-2002 and 2005-2008 are presented. These are revealed measures of life satisfaction obtained from a representative sample of the whole population. Comparisons are made between countries and changes over time are discussed. There is little indication that life satisfaction has necessarily improved over time. Relative rankings are compared with life satisfaction results from the HPI survey.

The WVS life satisfaction results are directly compared with measures of the household financial position of respondents, their perception of their health and their education level. The results from the 2000-2002 wave point to the fact that lower life satisfaction across countries is positively correlated with the perceived financial position of households, while suggesting health and education do not exhibit any clear relationship. The 2005-2008 wave, meanwhile, indicate a likely possible correlation between reported life satisfaction and both the household financial situation and education level. Again, the health level does not tend to relate to satisfaction.

The exploratory results presented here point to the need for a more detailed analysis of the survey data from each MENA country to allow more robust exploration of potential determinants of revealed satisfaction. Also, more work needs to be undertaken in shoring up the methodological approaches used in measuring SWB, or life satisfaction as presented here, and ensuring their validity conceptually and in practical determination and application.

## **References**

- \_\_\_\_\_. UAE Bahrain, Gulf Jobs Crisis, *Migration News*, April, 2008.
- \_\_\_\_\_. 2007, *The Dubai Strategic Plan–2015*, Government of Dubai, Available at [http://www.dubai.ae/en.portal?topic,hm\\_dxbstgplan,0,&\\_nfpb=true&\\_pageLabel=misc](http://www.dubai.ae/en.portal?topic,hm_dxbstgplan,0,&_nfpb=true&_pageLabel=misc)
- Alesina A. E. Glaeser & B. Sacerdote 2005, *Work and Leisure in the US and Europe: Why so Different?* Brookings Papers on Economic Activity, Fall.
- Alesina, A, Di Tella, D & MacCulloch, R 2001, Inequality and Happiness: Are Europeans and Americans Different? *NBER Working Paper*, 8198.
- Becchetti, L, Castriotti, S & Bedoya, D 2006, The Effect of Age and Job Protection on the Welfare Costs of Inflation and Unemployment: a Source of ECB Anti-inflation Bias. *Centre for Economic and International Studies (CEIS) Working Paper* No. 245.



- Bruni, L., Comim, F & Pugno, M (eds.) 2008, *Capabilities and Happiness*. Oxford University Press
- Caporale, G, Georgellis, Y, Tsitsianis, N & Yin, Y 2009, Income and happiness across Europe: Do reference values matter? *Journal of Economic Psychology*, 30: 42-51.
- Clark, A & Oswald, A 1994, Unhappiness and Unemployment. *Economic Journal*, 104, 648–59.
- Clark, AE 2003, Unemployment as a Social Norm: Psychological Evidence from Panel data, *Journal of Labor Economics*, April, 21: 323-351.
- Davis, J, Smith, T & Marsden, P 2001, *General Social Survey, 1972–2000: Cumulative Codebook*. Roper Center for Public Opinion Research.
- Di Tella, R & MacCulloch, R 2006, Some Uses of Happiness data, *Journal of Economic Perspectives*. 20(1): 34–43.
- Di Tella, R, MacCulloch, R & Oswald A. 2001, Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness *American Economic Review*, 91(1): 335–41.
- Diener, E & Suh, E 1997, Measuring quality of life: economic, social and subjective indicators. *Social Indicators Research*, 40, 1(2): 189–216.
- Diener, E 1984, Subjective well being, *Psychological Bulletin*, 95: 542 575.
- Dipietro, W & Anoruo, E 2006, GDP per capita and its challengers as measures of happiness. *International Journal of Social Economics*, 33(10): 698–709.
- Dockery, M 2005, The Happiness of Young Australians: Empirical Evidence on the Role of Labour Market Experience. *The Economic Record*, 81(255): 322–335.
- Easterlin, R 1974, Does Economic Growth Improve the Human Lot? Some Empirical Evidence, in *National and Households in Economic Growth: Essays in Honour of Moses Abramovitz*, P. David and M Reder, eds. New York and London: Academic Press: 98-125.
- Farid, M & Lazarus, H 2008, Subjective well-being in rich and poor countries, *Journal of Management Development*, 27(10): 1053-1065.
- Frey, B and Stutzer A 2001, *Happiness and Economics: How the Economy and Institutions Affect Human Well Being*, Princeton University Press, Princeton, NJ.
- Frey, BS & Stutzer, A 2002, What Can Economics Learn from happiness Research? *Journal of Economic Literature*, XL, June, 402–35.
- Helliwell, J 2003, How's life? Combining individual and national variables to explain Subjective well-being', *Economic Modelling*, 20, 331-60. Cited in Layard (2005), *Happiness and Public Policy: A challenge to the profession*. In *Economics and Psychology*. Cambridge, Mass MIT Press, 2007: 155-157.

- Humaid, S 2009, 'Cultural development, key to good governance', *Gulf News Online*, April 23, 2009, Available <http://www.gulfnews.com>
- Inglehart, R 1977, *The Silent Revolution: Changing Values and Political Styles Among Western Publics*. Princeton, NJ, Princeton University Press.
- Inglehart, R 2005, The Worldviews of Islamic Publics in Global Perspective. In Mansoor Moaddel (ed.) *Worldviews of Islamic Publics*, New York: Palgrave.
- Inglehart, R, Foa R, Peterson, C & Welzel C 2008, Development, Freedom and Rising happiness: A Global Perspective (1981–2007), *Perspectives on Psychological Science*, 3(4): 264–285.
- Inglehart, RF 2008, 'Changing Values among Western Publics from 1970 – 2006', *West European Politics*, Vol 31(1-2): 130-146.
- Kazmi, A 2009, Legacy of Sheikh Zayed, a beacon for new generations, *Gulf News Online*, May 20, 2009, Available, <http://www.gulfnewsonline.com>
- Kenny, C 2004, Does development make you happy? Subjective wellbeing and economic growth in developing countries. *Social Indicators Research*, 65: 1022.
- Luttner, E 2005, Neighbors as Negatives: Relative earnings and Well-Being. *Quarterly Journal of Economics*, 120(3): 963-1002.
- Mabe, M 2007 Survey Says: People Are Happier. Available at [http://www.businessweek.com/globalbiz/content/aug2008/gb20080820\\_874593.htm](http://www.businessweek.com/globalbiz/content/aug2008/gb20080820_874593.htm)
- Marcoulides, M & Moustaki, I 2009, *Latent Variable and Latent Structure Models*. Psychology Press, USA
- Alesina, A, Glaeser, E & Sacerdote, B 2002, Work and Leisure in the US and Europe: Why so Different? Mimeo, Harvard University.
- Noland, M & Pack, H 2007, *The Arab Economies in a Changing World*, Peterson Institute for International Economics, Washington DC.
- Organisation for Economic Co-operation and Development (OECD), Available at [www.oecd.org](http://www.oecd.org).
- Praag, B. & A Ferrer i Carbonell 2008, *Happiness Quantified: A satisfaction Calculus approach*, Oxford University Press, Oxford.
- Priestley, J 1767, *Utilitarianism.com*. 'massima felicità divisa nel maggior numero' from Italian political philosopher Beccaria's Essay on Crimes and Punishments.
- Ross, K & van Willigen, M 1997, Education and the Subjective Quality of Life, *Journal of Health and Social Behavior*. September, 38(3): 275–297.
- Saberi, R 2009, 'Arab Societies should be more proactive – experts', *Gulf News Online*, April 20, 2009, Available, <http://www.gulfnewsonline.com>

- Stevenson, B & Wolfers, J 2008, Happiness Inequality in the United States. *CEPR Discussion Paper*, 6929.
- Stevenson, B and Wolfers, J 2008, Happiness Inequality in the United States, *Journal of Legal Studies*, 37(S2): 33-S79.
- The Nielsen Company 2008, *How men and women cope in a recession - men will fare worse because for them, money equals happiness*: Nielsen. 9 December 2008. Available at [http://nz.acnielsen.com/news/Happiness\\_Dec08.shtml](http://nz.acnielsen.com/news/Happiness_Dec08.shtml).
- Toumi, H 2009, 'Gulf Identity faces double-threat', April 16, 2009, *Gulf News Online* Available <http://www.gulfnews.com>
- Ura, K & Galay K 2004, Gross National Happiness and Development, *The Centre for Bhutan Studies*. Available at <http://www.grossinternationalhappiness.org>.
- Van Hoorn, A (2007) *A Short Introduction to Subjective Well-Being; Its Measurement, Correlates and Policy Uses*. Paper prepared for international conference: Is Happiness Measurable and What do Those Measures Mean for Policy, Organised by the Bank of Italy, the Centre for Economic and International Studies (CEIS), the Joint research Centre of the European Commission for Economic Cooperation and Development (OECD), 23 April, University of Rome 'Tor Vergata'.
- Veenhoven, R 2007a, Trend Average Happiness in Nations, 1946–2004. *World Data Base of Happiness, Trend Report 1*, 2007 1. Available at [http://worlddatabaseofhappiness.eur.nl/hap\\_nat/findingreports/2007\\_1.pdf](http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/2007_1.pdf).
- Veenhoven, RH 2007b, Measures of Gross National Happiness. Paper presented at OECD World Forum on Statistics, Knowledge and Policy, Istanbul, Turkey, June 27 30, Roundtable on Measuring Happiness and Making Policy, June 27.
- World Bank 2009, Available at <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>
- World Development Indicators 2007, *The World Bank*. Available at <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/EXTDECSTAMAN/0,,contentMDK:20915418~menuPK:2648194~pagePK:64168445~piPK:64168309~theSitePK:2077967,00.html>
- World Values Survey Network, Available at <http://www.worldvaluessurvey.org/orgnaization/background.html>

## Appendix 1

### WVS Wave by Country and Year

<b>Algeria</b>	2002	n.a.
<b>Egypt</b>	2000	2008
<b>Iran</b>	2000	2005
<b>Iraq</b>	2004	2006
<b>Jordan</b>	2001	2007
<b>Morocco</b>	2001	2007
<b>Saudi Arabia</b>	2003	n.a.
<b>Turkey</b>	2001	2007

Source: UNDP, HDR (2009); HPI